



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/227,281 04/13/94 LEE

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EXAMINER  
TRAN, T

26M2/0312  
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P.O. BOX 747  
FALLS CHURCH, VA 22040-0747

ART UNIT PAPER NUMBER

10

2615

DATE MAILED:

03/12/96

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 8-8-95 and 12-8-95 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), - days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.  | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/>   |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-28 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☒ Claims 1-18 and 24-27 are allowed.

4. ☒ Claims 19-23 and 28 are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☒ The proposed drawing correction, filed 12-8-95, has been ☒ approved; ☐ disapproved (see explanation).

12. ☒ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☒ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

**EXAMINER'S ACTION**

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**Part III     DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

2. Claims 19-22 and 28 are rejected under 35 U.S.C. § 103 as being unpatentable over Hoshi in view of Honjo.

Hoshi discloses an apparatus for controlling reproduction in a video cassette tape recording having digital reproduction means (11 and c) for reproducing digital signals recorded on a magnetic

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tape, the digital reproduction means including a capstan motor (c); frame position information detecting means (20) for detecting position information of specific tracks on the magnetic tape, wherein specific tracks carrying specific data for a speed-varied reproduction; tape speed controlling means (32) for controlling a speed of the capstan motor based on the detected position information of the specific tracks; frame removing means (38 and 24) from the reproduced digital signals so as to output a speed-varied reproduced signal as recited in claims 19 and 28; a recording position-synchronized block detector (column 5, lines 3-15) for detecting from an output of the digital reproduction means, recording position-synchronized blocks including the position information of the specific tracks; a recording position decoder (20, 34, and 36) for decoding an output of the recording position-synchronized block detector based on a number of different tape speeds to calculate the speed of the capstan motor as recited in claim 20; a capstan servo speed calculator (34 and Fig. 3) for calculating a capstan servo speed for repeating a first speed travel and a second speed travel on the specific tracks in the speed-varied reproduction, based on the detected position information of the specific tracks and a speed multiple; capstan servo drive signal generator (32) for controlling driving of the capstan motor based on the calculated capstan servo speed as recited in claim 21; a

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deformatter (24) for converting an output of the digital reproduction means for output the speed-varied reproduced signal; a stuffing bit-detecting and removing circuit (20) for outputting a bit removing signal to the deformatter to remove stuffing bits or dummy bits recorded on the magnetic tape; and frame removal timing generator (34) for receiving the position information of the specific tracks from the frame position information detecting means and outputting a frame removing signal to the deformatter so as to prevent outputting of the specific data as recited in claim 22. However, Hoshi does not specifically discloses that the frame position information detecting means detects index information of the specific tracks on the magnetic tape and that the tape speed controlling means controls a speed of the capstan motor based on the detected index information as recited in claims 19, 20, and 28.

Honjo teaches, in the data reproducing apparatus, having frame position information detecting means (47) for detecting index information of the specific tracks on the magnetic tape and the tape speed controlling means (46) for controlling a speed of the capstan motor based on the detected index information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Hoshi's system with the capstan controlling system in a manner as taught in Honjo because Honjo teaches an advantage of accurately recording and

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reproducing data on the recording medium and such advantage being desirable to achieve efficient system operation in Hoshi.

3. Claim 23 is rejected under 35 U.S.C. § 103 as being unpatentable over Hoshi in view of Honjo as applied to claims 19-22 and 28 above, and further in view of admitted prior art (Fig. 2).

The proposed combination of Hoshi and Honjo discloses all the features of the instant invention except for providing that the specific data includes I-frames, and the digital reproduction means includes a plurality of heads and switches for selectively reproducing the digital signals.

The admitted prior art teaches a digital recording having means for reproducing the compressed video signal having I-frames and the means for reproducing having a plurality of heads and switches for selectively reproducing the digital signals (Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the reproducing apparatus of the admitted prior for the reproducing apparatus of Hoshi because the admitted prior art teaches an advantage of recording and reproducing the compressed video signal and such advantage being desirable to increase the storage capacity of the recording medium.

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***Allowable Subject Matter***

4. Claims 1-18 and 24-27 are allowable over the prior art of record.

Claims 1-18 and 24-27 are consider allowable over the prior art since none of the prior art of record alone or in combination disclose or suggest an apparatus for controlling recording and reproducing in a video cassette tape recorder having frame recording position controlling means for calculating a number of tracks for recording the compressed digital data and selectively outputting a buffered output, the extracted specific data from the frame extracting means and a multiplexing timing signal; frame position information recording means for recording position information of specific tracks for the speed-varied reproduction and index information on a magnetic tape, based on the multiplexing timing signal; and digital recording means for recording digital signals including the digital data and the index information on the magnetic tape as recited in claims 1 and 24 or an apparatus for controlling recording in a video cassette tape recorder having frame recording position controlling means for generating a multiplexing timing signal and multiplexing the compressed digital data and the extracted specific data form the frame extracting means based on the multiplexing timing signal; frame position information recording means for recording index information and position information of

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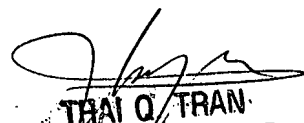
specific tracks for recording the specific data for the speed-varied reproduction on a magnetic tape based on the multiplexing timing signal; and digital recording means for recording digital signals including the digital data and specific data from the frame recording position controlling means on the magnetic tape as recited in claims 11 and 26.

5. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725 and whose fax number is (703) 308-5399.

TTQ  
March 9, 1996

  
**THAI Q. TRAN**  
**PATENT EXAMINER**  
**GROUP 20-200**